



DC Mathematics Priority Standards

As DC begins the transition to the Common Core State Standards, mathematics content area experts have identified the DC standards that will best help prepare students for the Common Core. These standards are referred to as the “priority standards.” The priority standards generally represent one or two essential skill sets for each grade. A summary of each grade’s skill sets with sample DC standards are presented below. For the complete list of priority standards see the 2012 DC CAS Math Blueprint.

In conjunction to the priority standards, teachers can also benefit from incorporating the Standards for Mathematical Practice into instruction. The Standards for Mathematical Practice describe varieties of math expertise that students should develop. For your convenience, the Standards for Mathematical Practice are appended to the 2012 DC CAS Math Blueprint.

Third Grade. The essential skills in third grade are multiplication of whole numbers.

Examples of essential multiplication skills include:

- Knowing that division is another way of expressing multiplication (3.NSO-C.15);
- Knowing multiplication facts through 10x10 and related division facts (3. NSO-C.16); and
- Estimating and finding the area and perimeter of a rectangle and triangle using diagrams, models, and grids or by measuring, focusing on the connection to multiplication (3.M.4).

Fourth Grade. The essential skills in fourth grade are fractions and multiplication and division of whole numbers.

Examples of essential fractions skills include:

- Demonstrating an understanding of fractions as parts of unit wholes, as parts of a collection, and as locations on a number line (4.NSO-F.9); and
- Selecting, using, and explain models to relate common fractions and mixed numbers; finding equivalent fractions, mixed numbers, and decimals (4.NSO-F.12).

Examples of essential multiplication and division of whole numbers skills include:

- Demonstrating understanding of and ability to use the conventional algorithms for multiplication of up to a three-digit whole number by a two-digit whole number. Multiplying three-digit whole numbers by two-digit whole numbers accurately and efficiently (4.NSO-C.19);
- Mentally calculating simple products and quotients up to a three-digit number by a one-digit number (4.NSO-C.22); and
- Selecting and using appropriate operations (addition, subtraction, multiplication, and division) to solve problems, including those involving money (4.NSO-C.25).

Fifth Grade. In the fifth grade the focus is on operations with fractions and operations with whole numbers and decimals.

Examples of essential operations with fractions skills include:

- Explain different interpretations of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, as division of whole numbers by whole numbers, and as locations on the number line. (5.NSO-F.8); and

- Adding and subtracting fractions (including mixed numbers) with like and unlike denominators (of 2, 3, 4, 5, 6 and 10), and expressing answers in the simplest form (5.NSO-C.13).

Examples of essential operations with whole numbers and decimal skills include:

- Adding and subtracting positive decimals (5.NSO-C.14); and
- Demonstrating an understanding of and compute (positive integer) powers of 10 (e.g., 10^2 , 10^2); computing examples as repeated multiplication (5.NSO-C.20).

Sixth Grade. In the sixth grade the focus is on rational numbers.

Examples of rational number skills include:

- Identifying and determining common equivalent fractions, mixed numbers, decimals, and percentages (6.NSO-N.5);
- Accurately and efficiently adding, subtracting, multiplying, and dividing (with multidigit divisors) whole numbers and positive decimals (6.NSO-C.10);
- Understanding multiplication of a negative number by a positive integer as repeated addition (6.NSO-C.16); and
- Applying the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols (6.NSO-C.17).

Seventh Grade. In the seventh grade the focus is on proportional reasoning.

Examples of essential proportions reasoning skills include:

- Expressing ratios in several ways (e.g., 3 cups to 5 people; 3:5; 3/5); recognizing and finding equivalent ratios (7.NSO-N.8);
- Calculating the percentage increase and decrease of a quantity (7.NSO-C.13);
- Using ratios and proportions in the solution of problems involving unit rates, scale drawings, and reading of maps (7.NSO-C.14); and
- Using linear equations to model and analyze problems involving proportional relationships, focusing on proportional reasoning (7.PRA.8).

Eighth Grade. In the eighth grade, the focus is on linear algebra.

Examples of essential linear algebra skills include:

- Using tables and graphs to represent and compare linear growth patterns. In particular, comparing rates of change and x- and y-intercepts of different linear patterns (8.PRA.1);
- Setting up and solving linear equations and inequalities with one or two variables using algebraic methods and graphs (8.PRA.2);
- Using linear equations to model and analyze problems involving proportional relationships (8.PRA.3); and
- Graphing a linear equation using ordered pairs; identify and represent the graphs of linear functions (8.PRA.9).

Grade 10. In tenth grade, the focus is on linear functions and polynomials.

Examples of essential linear functions skills include:

- Recognizing, describing, and extending patterns governed by a linear, quadratic, or exponential functional relationship or by a simple iterative process (e.g., the Fibonacci sequence) (A.I.P.1);
- Determining a line's slope and x- and y-intercepts from its graph or from a linear equation that represents the line (A.I.P.5); and

- Solving everyday problems (e.g., mixture, rate, and work problems) that can be modeled using systems of linear equations or inequalities. Applying algebraic and graphical methods to the solution (A.I.P.15).

An example of essential polynomial skills includes:

- Adding, subtracting, and multiplying polynomials with emphasis on 1st- and 2nd-degree polynomials (A.I.P.8).



2012 DC CAS Math Blueprint

For the 2012 DC CAS mathematics assessment, teachers should focus on the DC priority standards identified in the blueprint. The priority standards are the essential standards needed to transition in 2013 to Common Core mathematics standards.

Grade 3

Reporting Category: Number Sense and Operations (12%)

DC Standards:
3.NSO-N.1 Exhibit an understanding of the base 10 number system by reading, modeling, and writing whole numbers to at least 10,000; demonstrate an understanding of the values of the digits.
3.NSO-N.2 Represent, compare, and order numbers to 10,000 using various forms, including expanded notation and written out in words.
3.NSO-N.3 Round whole numbers through 10,000 to the nearest 10, 100, and 1,000.
3.NSO-N.4 Recognize sets to which a number may belong (odd numbers, even numbers, and multiples of numbers through 10). Identify the numbers in those classes.
3.NSO-F.5 Identify and represent fractions (between 0 and 1 with denominators through 10) as parts of unit wholes and parts of a collection.
3.NSO-F.6 Recognize, name, and use equivalent fractions with denominators 2, 3, 4, and 8; place these fractions on the number line; compare and order them and relate the number line to a ruler.
3.NSO-F.7 Know the meaning of 0.75, 0.50, and 0.25 as they relate to money; know that fractions and decimals are two different representations of the same concept.
3.NSO-F.8 Know that any fraction can be written as a sum of unit fractions.
3.NSO-F.9 Model and represent a mixed number (with denominator 2, 3, or 4) as a whole number and a fraction.
3.NSO-C.10 Demonstrate an understanding of and the ability to use conventional algorithms for the addition and subtraction of up to five-digit whole numbers.
3.NSO-C.11 Add and subtract up to four-digit whole numbers accurately and efficiently.
3.NSO-C.12 Use concrete objects and visual models to add and subtract common fractions (halves, thirds, fourths, sixths, and eighths) with like denominators.
3.NSO-C.13 Solve problems involving addition and subtraction of money amounts in decimal notation.
3.NSO-C.14 Know multiplication is the result of counting the total number of objects in a set of equal groups.
3.NSO-C.18 Solve division problems in which a multidigit whole number is evenly divided by a one-digit number.
3.NSO-C.19 Multiply up to two-digit whole numbers by a one-digit whole number accurately and efficiently.
3.NSO-E.23 Estimate the sum and difference of two numbers with three digits (sums up to 1,000) and judge reasonableness of estimates.

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<i>Reporting Category: Number Sense and Operations (Priority Standards) (18%)</i>
DC Standards:
3.NSO-C.15 Know division (\div) as another way of expressing multiplication, i.e., that division is the inverse of multiplication.
3.NSO-C.16 Know multiplication facts through 10×10 and related division facts. Use these facts to solve related problems.
3.NSO-C.17 Solve simple problems involving multiplication of multidigit whole numbers by one-digit numbers.
3.NSO-C.20 Use the commutative (order) and identity properties of addition and multiplication on whole numbers in computations and problem situations.
3.NSO-C.21 Know and apply the special properties of 0 and 1 in multiplication.
<i>Reporting Category: Patterns, Relations, and Algebra (17%)</i>
DC Standards:
3.PRA.1 Create, describe, and extend symbolic (geometric) patterns and addition and subtraction patterns.
3.PRA.2 Select appropriate operational and relational symbols to make an expression true.
3.PRA.3 Determine values of variables in simple equations involving addition, subtraction, or multiplication.
3.PRA.4 Know and express the relationships among linear units of measure, i.e., unit conversions.
3.PRA.5 Extend and recognize a linear pattern by its rules.
<i>Reporting Category: Geometry (12%)</i>
DC Standards:
3.G.1 Compare and analyze attributes and other features (e.g., number and shape of sides, faces, corners, right angles) of two-dimensional geometric shapes, especially the attributes of triangles (isosceles, equilateral, right) and quadrilaterals (rectangle, square).
3.G.2 Describe, model, draw, compare, and classify three-dimensional and two-dimensional shapes, especially circles and polygons (e.g., triangles and quadrilaterals).
3.G.3 Identify angles as right, acute (less than a right angle), or obtuse (greater than a right angle).
3.G.4 Identify and draw lines that are parallel, perpendicular, and intersecting.
3.G.5 Identify and draw lines of symmetry in two-dimensional shapes.
3.G.6 Apply techniques such as reflections (flips), rotations (turns), and translations (slides) for determining if two shapes are congruent.
3.G.7 Using ordered pairs of whole numbers and/or letters, locate and identify points on a grid.
<i>Reporting Category: Measurement (3%)</i>
DC Standards:
3.M.2 Carry out simple unit conversions within a system of measurement such as hours to minutes and cents to dollars.

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3.M.3 Identify time to the nearest 5 minutes on analog and digital clocks using a.m. and p.m. Compute elapsed time using a clock (e.g., hours and minutes since ...) and using a calendar (e.g., days since ...).
<i>Reporting Category: Measurement (Priority Standards) (17%)</i>
DC Standards:
3.M.1 Demonstrate an understanding of such attributes as length, area, and weight; select the appropriate type of unit for measuring each attribute using both the U.S. customary and metric systems.
3.M.4 Estimate and find area and perimeter of a rectangle and triangle using diagrams, models, and grids or by measuring.
<i>Reporting Category: Data Analysis, Statistics, and Probability (22%)</i>
DC Standards:
3.DASP.1 Collect and organize data using observations, measurements, surveys, or experiments.
3.DASP.2 Construct, identify the main idea, and make predictions from various representations of data sets in the forms of tables, bar graphs (horizontal and vertical forms), pictographs, and tallies.
3.DASP.4 Classify outcomes as certain, likely, unlikely, or impossible.
3.DASP.5 List and count the number of possible combinations of objects from 2 sets.

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Grade 4

<i>Reporting Category: Number Sense and Operations (7%)</i>
DC Standards:
4.NSO-N.1 Exhibit an understanding of the base 10 number system by reading, modeling, and writing whole numbers to at least 100,000; demonstrating an understanding of the values of the digits; and comparing and ordering the numbers.
4.NSO-N.2 Represent, compare, and order numbers to 100,000 using various forms, including expanded notation.
4.NSO-N.3 Round whole numbers to 100,000 to the nearest 10, 100, 1,000, 10,000, and 100,000.
4.NSO-N.4 Recognize sets to which a number may belong (odds, evens, multiples and factors of given numbers, and squares), and use these in the solution of problems.
4.NSO-N.5 Read and interpret whole numbers and decimals up to two decimal places; relate to money and place-value decomposition.
4.NSO-N.6 Determine if a whole number is a multiple of a given one-digit whole number and if a one-digit number is a factor of a given whole number.
4.NSO-N.7 Find all factors of a whole number up to 50; know that numbers such as 2, 3, 5, 7, and 11 do not have any factors except one and itself and that such numbers are called prime numbers.
4.NSO-N.8 Use concepts of negative numbers (e.g., on a number line, in counting, in temperature, in owing money).
4.NSO-F.8 Use concepts of negative numbers.
4.NSO-F.11 Recognize, name, and generate equivalent forms of common decimals (0.5, 0.25, 0.2, 0.1) and fractions (halves, quarters, fifths, and tenths) and explain why they are equivalent.
4.NSO-F.13 Represent positive decimals to the hundredths.
4.NSO-C.15 Add and subtract up to five-digit numbers accurately and efficiently.
4.NSO-C.18 Use concrete objects and visual models to add and subtract common fractions (halves, thirds, fourths, sixths, and eighths) with like denominators.
4.NSO-C.21 Multiply fractions by whole numbers, using repeated addition and area rectangular models.
4.NSO-C.23 Multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors.
4.NSO-C.24 Determine the unit cost when given the total cost and number of units.
4.NSO-E.28 Estimate and compute the sum or difference of whole numbers and positive decimals to two places.
4.NSO-E.29 Estimate the answers to calculations involving addition, subtraction, or multiplication; know when approximation or a rounded solution is appropriate and use it to check the reasonableness of answers.
<i>Reporting Category: Number Sense and Operations (Priority Standards) (32%)</i>
DC Standards:
4.NSO-F.9 Demonstrate an understanding of fractions as parts of unit wholes, as parts of a collection, and as locations on a number line.
4.NSO-F.10 Know the relationships among halves, fourths, and eighths and among thirds, sixths, and twelfths; compare and order such fractions.
4.NSO-F.12 Select, use, and explain models to relate common fractions and mixed numbers (e.g., $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{12}$, and $1\frac{1}{2}$);

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find equivalent fractions, mixed numbers, and decimals.
4.NSO-C.16 Use concrete objects and visual models to add and subtract fractions where the denominators are equal or when one denominator is a multiple of the other (denominators 2 through 12, and 100).
4.NSO-C.19 Demonstrate understanding of and ability to use the conventional algorithms for multiplication of up to a three-digit whole number by a two-digit whole number. Multiply three-digit whole numbers by two-digit whole numbers accurately and efficiently.
4.NSO-C.20 Demonstrate understanding of and the ability to use the conventional algorithm for division of up to a three-digit whole number with a single-digit divisor (with or without remainders). Divide up to a three-digit whole number with a single-digit divisor accurately and efficiently. Interpret any remainders.
4.NSO-C.27 Use the relationship between multiplication and division to simplify computations and check results.
4.NSO-C.22 Mentally calculate simple products and quotients up to a three-digit number by a one-digit number (e.g., 400×7 , or $320 \div 8$).
4.NSO-C.25 Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems, including those involving money.
4.NSO-C.26 Select, use, and explain the commutative, associative, and identity properties of operations on whole numbers in problem situations.
<i>Reporting Category: Patterns, Relations, and Algebra (17%)</i>
DC Standards:
4.PRA.1 Create, describe, extend, and explain geometric and numeric patterns, including multiplication patterns such as 3, 30, 300, and 3,000; generalize the rule for the pattern and make predictions when given a table of number pairs of a set of data.
4.PRA.2 Use letters and other symbols (e.g., s, x) as variables in expressions and in equations or inequalities (mathematical sentences that use =, <, and >).
4.PRA.3 Use pictures, models, tables, charts, graphs, words, number sentences, and mathematical notations to interpret mathematical relationships.
4.PRA.4 Solve problems involving proportional relationships, including unit pricing (e.g., 4 apples cost 80 cents, so 1 apple costs 20 cents) and map interpretation (e.g., 1 inch represents 5 miles, so 2 inches represent 10 miles).
4.PRA.5 Determine how change in one variable relates to a change in a second variable (e.g., input-output tables).
<i>Reporting Category: Geometry (12%)</i>
DC Standards:
4.G.1 Compare and analyze attributes and other features (e.g., number of sides, faces, corners, right angles, diagonals, and symmetry) of two- and three dimensional geometric shapes.
4.G.2 Describe, model, draw, compare, and classify two- and three-dimensional shapes (e.g., circles, polygons, parallelograms, trapezoids, cubes, spheres, pyramids, cones, cylinders).
4.G.3 Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90° , 180° , 270° , and 360° are associated, respectively, with $1/4$, $1/2$, $3/4$, and full turns.
4.G.4 Describe and draw intersecting, parallel, and perpendicular lines.
4.G.5 Recognize similar figures (two shapes, R and S, are similar if they are congruent after one of them is shrunk or expanded).
4.G.6 Describe and apply techniques such as reflections (flips), rotations (turns), and translations (slides) for determining if two shapes are congruent.
4.G.7 Predict and validate the results of partitioning, folding, and combining two- and three-dimensional shapes.

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Reporting Category: Measurement (12%)

DC Standards:

4.M.2 Carry out simple unit conversions within a system of measurement (e.g., yards to feet or inches; gallons to quarts and pints).

4.M.3 Identify time to the minute on analog and digital clocks using a.m. and p.m. Compute elapsed time using a clock (e.g., hours and minutes since ...) and using a calendar (e.g., days since ...).

4.M.4 Estimate and find area and perimeter of shapes, including irregular shapes, using diagrams, models, and grids or by measuring.

4.M.5 Recognize that rectangles that have the same area can have different perimeters; understand that rectangles that have the same perimeter can have different areas.

Reporting Category: Data Analysis, Statistics, and Probability (22%)

DC Standards:

4.DASP.1 Collect and organize data using observations, measurements, surveys, or experiments, and identify appropriate ways to display the data.

4.DASP.2 Match a representation of a data set, such as lists, tables, or graphs (including circle graphs), with the actual set of data.

4.DASP.3 Compare two data sets represented in two bar graphs, pie graphs, and histograms.

4.DASP.4 Represent the possible outcomes for a simple probability situation.

4.DASP.5 List and count the number of possible combinations of objects from 3 sets.

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Grade 5

Reporting Category: Number Sense and Operations (13%)

DC Standards:

5.NSO-N.1 Estimate, round, and manipulate very large (e.g., billions) and very small (e.g., thousandths) numbers; demonstrate an understanding of place value to billions and thousandths.

5.NSO-N.2 Represent and compare very large (billions) and very small (thousandths) positive numbers in various forms, such as expanded notation without exponents e.g., $9,724 = (9 \times 1,000) + (7 \times 100) + (2 \times 10) + 4$.

5.NSO-N.3 Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.

5.NSO-N.4 Compare and order integers (including negative integers) and positive fractions, mixed numbers, decimals, and percents.

5.NSO-N.5 Apply the number theory concepts of common factor, common multiple, and divisibility rules for 2, 3, 5, and 10 to the solution of problems. Demonstrate an understanding of the concepts of prime and composite numbers.

5.NSO-N.6 Know the set of prime numbers to 100.

5.NSO-N.7 Determine the prime factors of all numbers through 100, and write the numbers as the product of their prime factors by using exponents to show multiples of a factor (e.g., $24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$).

5.NSO-F.9 Interpret percents as parts out of 100, use % notation, and express a part of a whole as a percentage.

5.NSO-F.10 Identify and determine common equivalent fractions, mixed numbers (with denominators 2, 4, 5, and 10), decimals, and percents, and explain why they represent the same value.

5.NSO-F.11 Write improper fractions as mixed numbers, and know that a mixed number represents the number of "wholes" and the part of a whole remaining.

5.NSO-C.12 Add with negative integers, subtract positive integers from negative integers, and verify the reasonableness of the results.

5.NSO-C.15 Solve problems involving multiplication and division of any whole number.

5.NSO-C.17 Show an understanding of multiplication and division of fractions; multiply positive fractions with whole numbers.

5.NSO-C.19 Multiply positive decimals with whole numbers.

5.NSO-C.21 Know integer subtraction is the inverse of integer addition; use the number line to model addition and subtraction of integers and add and subtract integers, with the exception of subtracting negative integers.

5.NSO-C.22 Demonstrate an understanding of how parentheses affect expressions involving addition, subtraction, and multiplication, and use that understanding to solve problems.

Reporting Category: Number Sense and Operations (Priority Standards) (20%)

DC Standards:

5.NSO-F.8 Explain different interpretations of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, as division of whole numbers by whole numbers, and as locations on the number line.

5.NSO-C.13 Add and subtract fractions (including mixed numbers) with like and unlike denominators (of 2, 3, 4, 5, 6 and 10), and express answers in the simplest form.

5.NSO-C.18 Simplify fractions in cases when both the numerator and the denominator have 2, 3, 4, 5, or 10 as a common factor. Show that two fractions are or are not equivalent by reducing to simpler forms or by finding a common denominator.

5.NSO-E.23 Estimate sums and differences of whole numbers, positive fractions, and positive decimals. Estimate products of whole numbers

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and products of positive decimals with whole numbers. Use a variety of strategies and judge reasonableness of answers
5.NSO-C.14 Add and subtract positive decimals.
5.NSO-C.16 Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors.
5.NSO-C.20 Demonstrate an understanding of and compute (positive integer) powers of 10 (e.g., 10^2 , 10^2); compute examples as repeated multiplication.
<i>Reporting Category: Patterns, Relations, and Algebra (22%)</i>
DC Standards:
5.PRA.1 Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions (e.g., ABBCCC ...; 1, 5, 9, 13, ...; 3, 9, 27, ...).
5.PRA.2 Replace variables with given values, evaluate, and simplify.
5.PRA.3 Use the properties of equality to solve problems with whole numbers.
5.PRA.4 Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols (e.g., input-output tables).
5.PRA.5 Interpret and evaluate mathematical expressions that use parentheses; use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.
5.PRA.6 Solve problems involving proportional relationships using concrete models, tables, graphs, and paper-pencil methods.
5.PRA.7 Interpret graphs that represent the relationship between two variables in everyday situations.
<i>Reporting Category: Geometry (15%)</i>
DC Standards:
5.G.1 Identify polygons based on their properties, including types of interior angles, perpendicular or parallel sides, and congruence of sides (e.g., squares, rectangles, rhombuses, parallelograms, and trapezoids; isosceles, equilateral, and right triangles).
5.G.2 Identify, describe, and compare special types of three-dimensional shapes (e.g., cubes, prisms, spheres, cones, and pyramids) based on their properties, such as edges and faces.
5.G.3 Identify relationships among points, lines, and planes (e.g., intersecting, parallel, perpendicular).
5.G.5 Determine if two triangles or two quadrilaterals are congruent by measuring sides or a combination of sides and angles.
5.G.6 Predict, describe, and perform transformations on two-dimensional shapes (e.g., translations, rotations, and reflections).
5.G.7 Graph points and identify coordinates of points on the Cartesian coordinate plane in the first two quadrants.
<i>Reporting Category: Measurement (15%)</i>
DC Standards:
5.M.1 Apply the concepts of perimeter and area to the solution of problems involving triangles and rectangles. Apply formulas where appropriate.
5.M.2 Apply formulas for the areas of triangles, rectangles, and parallelograms; recognize that shapes with the same number of sides but different appearances can have the same area.
5.M.3 Solve problems involving proportional relationships and units of measurement.
5.M.4 Identify, measure, and describe circles and the relationships of the radius, diameter, circumference, and area (e.g., $d = 2r$), and use these concepts to solve problems.
5.M.5 Find volumes and surface areas of rectangular prisms.
5.M.7 Identify, measure, describe, classify, and draw various angles and triangles, given sides and the angle between them or given two angles and the side between them.

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Reporting Category: Data Analysis, Statistics, and Probability (15%)

DC Standards:

5.DASP.1 Define and apply the concepts of mean to solve problems.

5.DASP.2 Construct, draw conclusions, and make predictions from various representations of data sets, including tables, line graphs, line plots, circle graphs, and bar graphs (where symbols or scales represent multiple units).

5.DASP.3 Predict the probability of outcomes of simple experiments and test the predictions.

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Grade 6

Reporting Category: Number Sense and Operations (5%)	
DC Standards:	
6.NSO-N.1	Explain the properties of and compute with rational numbers, expressed in a variety of forms.
6.NSO-N.2	Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.
6.NSO-N.3	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative nor positive.
6.NSO-N.4	Represent rational numbers as repeating or terminating decimals when possible, and translate between these representations.
6.NSO-N.5	Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.
6.NSO-N.7	Round whole numbers and decimals to any given place.
6.NSO-N.8	Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers and with positive fractions, mixed numbers, decimals, and percentages.
6.NSO-C.10	Accurately and efficiently add, subtract, multiply, and divide (with multidigit divisors) whole numbers and positive decimals.
6.NSO-C.11	Use prime factorization to add and subtract fractions with like and unlike denominators.
6.NSO-C.12	Accurately and efficiently add, subtract, multiply, and divide positive fractions (including mixed numbers) with like and unlike denominators. Simplify fractions.
6.NSO-C.13	Calculate given percentages of quantities, and solve problems involving discounts at sales, interest earned, and tips.
6.NSO-C.14	Solve simple proportion problems using such methods as unit rate, scaling, finding equivalent fractions, and solving the proportion equation $a/b = c/d$.
6.NSO-C.15	Apply laws of exponents to multiply whole number powers with like bases.
6.NSO-C.16	Understand multiplication of a negative number by a positive integer as repeated addition.
6.NSO-C.17	Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols.
6.NSO-E.18	Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.
Reporting Category: Number Sense and Operations (Priority Standards) (25%)	
DC Standards:	
6.NSO-N.3	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative nor positive.
6.NSO-N.5	Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.
6.NSO-C.8	Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers and with positive fractions, mixed numbers, decimals, and percentages.
6.NSO-C.10	Accurately and efficiently add, subtract, multiply, and divide (with multidigit divisors) whole numbers and positive decimals.
6.NSO-C.11	Use prime factorization to add and subtract fractions with like and unlike denominators.
6.NSO-C.12	Accurately and efficiently add, subtract, multiply, and divide positive fractions (including mixed numbers) with like and unlike denominators. Simplify fractions.
6.NSO-C.16	Understand multiplication of a negative number by a positive integer as repeated addition.
6.NSO-C.17	Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols.

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<i>Reporting Category: Patterns, Relations, and Algebra (27%)</i>
DC Standards:
6.PRA.1 Use the properties of equality to solve problems using letter name variables.
6.PRA.2 Write and solve one-step linear equations and check the answers.
6.PRA.3 Identify and describe relationships between two variables with a constant rate of change (e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches). Contrast these with relationships where the rate of change is not constant.
6.PRA.4 Simplify expressions of the first degree by combining like terms, and evaluate using specific values.
6.PRA.5 Understand that adding or subtracting the same number to both sides of an equation creates a new equation that has the same truth values.
6.PRA.6 Understand that multiplying or dividing both sides of an equation by the same nonzero number creates a new equation that has the same truth values.
6.PRA.7 Distinguish between an algebraic expression and an equation.
6.PRA.8 Recognize when information given in a table, graph, or formula suggests a proportional or linear relationship.
6.PRA.9 Produce and interpret graphs that represent the relationship between two variables (x and y) in everyday situations.
<i>Reporting Category: Geometry (13%)</i>
DC Standards:
6.G.1 Match three-dimensional objects and their two-dimensional representations (e.g., nets, projections, and perspective drawings).
6.G.2 Identify angles as vertical, adjacent, complementary, or supplementary; provide descriptions of these terms; and use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle.
6.G.3 Determine if two shapes are congruent by motions or series of motions (e.g., translations, rotations, and reflections); predict the results of transformations on unmarked planes and draw the transformed figure (e.g., predict how tessellations transform under translation, reflection, and rotation).
6.G.4 Graph points and identify coordinates of points on the Cartesian coordinate plane in all four quadrants.
6.G.5 Find the distance between two points on horizontal or vertical number lines.
<i>Reporting Category: Measurement (13%)</i>
DC Standards:
6.M.1 Differentiate between and use appropriate units of measures for two- and three-dimensional objects (i.e., when finding perimeter, area, and volume).
6.M.2 Find areas of triangles and parallelograms. Recognize that shapes with the same number of sides but different appearances can have the same area.
6.M.3 Develop strategies to find the area and perimeter of complex shapes (e.g., subdividing them into basic shapes such as quadrilaterals, triangles, circles).
6.M.5 Understand the concept of volume; use the appropriate units in common measuring systems (e.g., cubic inch, cubic centimeter, cubic meter, cubic yard) to compute the volume of rectangular solids, including rectangular prisms.
6.M.6 Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals; measure the interior angles of various polygons.
6.M.7 Understand the concept of the constant π ; know the formulas for the circumference and area of a circle. Use the concepts to solve problems.

[Type text]

6.M.8 Know and use the formulas for the volumes and surface areas of cubes and rectangular prisms, given the lengths of their sides.
6.M.9 Find the sum of the angles in simple polygons (up to eight sides) with and without measuring the angles.
<i>Reporting Category: Data Analysis, Statistics, and Probability (17%)</i>
DC Standards:
6.DASP.1 Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum, and range.
6.DASP.3 Construct, label, and interpret stem-and-leaf plots.
6.DASP.4 Use tree diagrams and other models (e.g., lists and tables) to represent possible or actual outcomes of trials.
6.DASP.5 Represent two numerical variables on a scatterplot, and describe any apparent relationship that exists between the two variables (e.g., between time spent on homework and grades in class).
6.DASP.6 Compute probabilities of events from simple experiments with equally likely outcomes (e.g., tossing dice, flipping coins, spinning spinners) by listing all possibilities and finding the fraction that meets given conditions. Analyze the outcomes.
6.DASP.7 Use appropriate ratios between 0 and 1 to represent the probability of the outcome and associate the probability with the likelihood of the event; know that 0 probability means an event will not occur and that a probability of 1 means an event will occur.

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Grade 7

Reporting Category: Number Sense and Operations (15%)

DC Standards:

7.NSO-N.1 Compare, order, estimate, and translate among integers, fractions, mixed numbers (i.e., rational numbers), decimals, and percents.

7.NSO-N.2 Know that in decimal form, rational numbers either terminate or eventually repeat; locate rational numbers on the number line; convert between common repeating decimals and fractions.

7.NSO-N.3 Know the concept of absolute value (e.g., $|-3| = |3| = 3$).

7.NSO-N.4 Represent numbers in scientific notation (positive powers of 10 only), and use that notation in problem situations.

7.NSO-N.5 Differentiate between rational and irrational numbers (i.e., know that irrational numbers cannot be expressed as the quotient of two integers and cannot be represented by terminating or repeating decimals).

7.NSO-N.6 Interpret positive whole-number powers as repeated multiplication and negative powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents.

7.NSO-N.7 Apply number theory concepts, including prime factorization and relatively prime numbers, to the solution of problems.

7.NSO-N.9 Know the meaning of a square root of a number and its connection to the square whose area is the number.

7.NSO-C.10 Compute with fractions (including simplification of fractions), integers, decimals, and percentages (including those greater than 100 and less than 1) using the four operations and combinations of the four operations.

7.NSO-C.11 Demonstrate an understanding of the properties of arithmetic operations on rational numbers (integers, fractions, and terminating decimals); convert terminating decimals into reduced fractions.

7.NSO-C.12 Select and use appropriate operations - addition, subtraction, multiplication, division - to solve problems with rational numbers and negative integers.

7.NSO-C.15 Take positive and negative rational numbers to positive whole number powers.

7.NSO-C.16 Apply the laws of exponents to multiply whole number positive and negative powers of whole numbers; divide whole number powers with like bases; explain the inverse relationship between negative and positive exponents.

7.NSO-C.17 Use the inverse relationships of addition/subtraction and multiplication/division to simplify computations and solve problems (e.g., multiplying by $1/2$ or 0.5 is the same as dividing by 2).

7.NSO-C.18 Use the associative, commutative, and distributive properties; properties of the identity and inverse elements (e.g., $-7 + 7 = 0$; $3/4 \times 4/3 = 1$) to solve problems.

7.NSO-C.19 Know and apply the Order of Operations rules to expressions involving powers and roots.

7.NSO-E.20 Estimate results of computations with rational numbers; determine estimates to a certain stated accuracy.

Reporting Category: Number Sense and Operations (Priority Standards) (15%)

DC Standards:

7.NSO-N.8 Express ratios in several ways (e.g., 3 cups to 5 people; $3:5$; $3/5$); recognize and find equivalent ratios.

7.NSO-C.13 Calculate the percentage increase and decrease of a quantity.

7.NSO-C.14 Use ratios and proportions in the solution of problems involving unit rates, scale drawings, and reading of maps.

Reporting Category: Patterns, Relations, and Algebra (22%)

DC Standards:

7.PRA.1 Extend, represent, analyze, and generalize a variety of patterns with tables, graphs, words, and, when possible, symbolic expressions.

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Include arithmetic and geometric progressions (e.g., compounding).
7.PRA.2 Evaluate simple algebraic expressions for given variable values (e.g., $3a^2 - b$ for $a = 3$ and $b = 7$).
7.PRA.3 Use the correct order of operations to evaluate expressions (e.g., $3(2x) = 5$).
7.PRA.4 Create and use symbolic expressions for linear relationships, and relate them to verbal and graphical representations.
7.PRA.5 Use variables and appropriate operations to write an expression, equation, or inequality that represents a verbal description (e.g., 3 less than a number, $1/2$ as large as area A).
7.PRA.6 Write and solve two-step linear equations and check the answers.
7.PRA.7 Identify, describe, and analyze linear relationships between two variables. Compare positive rate of change (e.g., $y = 3x + 1$) to negative rate of change (e.g., $y = -3x + 1$).
7.PRA.9 Simplify numerical expressions by applying properties of rational numbers (e.g., identity, inverse) and operations of rational numbers (distributive, associative, commutative); justify the process used.
7.PRA.10 Use algebraic terminology including, but not limited to, variable, equation, term, coefficient, inequality, expression, and constant.
7.PRA.11 Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities.
<i>Reporting Category: Patterns, Relations, and Algebra (Priority Standards) (3%)</i>
DC Standards:
7.PRA.8 Use linear equations to model and analyze problems involving proportional relationships.
<i>Reporting Category: Geometry (13%)</i>
DC Standards:
7.G.1 Identify three-dimensional figures (e.g., prisms, pyramids) by their physical appearance, distinguishing attributes, and spatial relationships such as parallel faces.
7.G.2 Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures.
7.G.3 Classify figures in terms of congruence and similarity, and apply these relationships to the solution of problems.
7.G.4 Know and understand the Pythagorean theorem and its converse. Apply the theorem to the solution of problems, including using it to find the length of the missing side of a right triangle, and perimeter, area, and volume problems.
7.G.5 Use compass, straightedge, and protractor to perform basic geometric constructions to draw polygons and circles.
7.G.6 Understand and use coordinate graphs to plot simple figures; determine lengths and areas related to them; and determine their image under translations, reflections, and rotations (e.g., predict how tessellations transform under translations, reflections, and rotations).
<i>Reporting Category: Measurement (2%)</i>
DC Standards:
7.M.1 Select, convert (between systems of measurement), and use appropriate units of measurement or scale.
7.M.2 Demonstrate an understanding of the concepts and apply formulas and procedures for determining measures, including those of area and perimeter/circumference of parallelograms, trapezoids, and circles. Given the formulas, determine the surface area and volume of rectangular prisms and cylinders.
7.M.5 Use ratio and proportion, including scale factors, in the solution of problems.
<i>Reporting Category: Measurement (Priority Standards) (15%)</i>
DC Standards:

[Type text]

7.M.3 Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; use models, graphs, and formulas to solve simple problems involving rates (e.g., velocity and density); check the units of the solutions; use dimensional analysis to check the reasonableness of the answer.

7.M.4 Construct and read drawings and models made to scale.

Reporting Category: Data Analysis, Statistics, and Probability (15%)

DC Standards:

7.DASP.2 Select, create, interpret, and use various tabular and graphical representations of data (e.g., circle graphs, Venn diagrams, stem-and-leaf plots, histograms, tables, and charts).

7.DASP.3 Describe the characteristics and limitations of a data sample. Identify different ways of selecting a sample (e.g., convenience sampling, responses to a survey, random sampling).

7.DASP.4 Use tree diagrams, tables, organized lists, and area models to compute probabilities for simple compound events (e.g., multiple coin tosses or rolls of dice).

7.DASP.5 Understand that the probability of either of two disjoint events occurring is the sum of the two individual probabilities and that the probability of one event following another, in independent trials, is the product of the two probabilities.

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Grade 8

Reporting Category: Number Sense and Operations (25%)

DC Standards:

- 8.NSO-N.1 Explain the properties of and compute with real numbers expressed in a variety of forms.
- 8.NSO-N.2 Know that every rational number is either a terminating or repeating decimal and that every irrational number is a nonrepeating decimal.
- 8.NSO-N.3 Know that the absolute value is the distance of the number from 0; determine the absolute value and additive inverse of real numbers; determine the absolute value of rational numbers.
- 8.NSO-N.4 Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10), and use them in calculations and problem situations.
- 8.NSO-N.5 Define, compare, order, and apply frequently used irrational numbers, such as $\sqrt{2}$ and π (e.g., show that if π is known to be irrational, then 3π and $\pi/3$ also are irrational).
- 8.NSO-N.7 Demonstrate an understanding of the properties of arithmetic operations on rational numbers.
- 8.NSO-C.8 Calculate weighted averages such as course grades, consumer price indexes, and sports ratings.
- 8.NSO-C.10 Solve problems involving derived quantities such as density, velocity, and weighted averages.
- 8.NSO-C.11 Solve problems that involve markups, commissions, profits, and simple and compound interest.
- 8.NSO-C.12 Apply the rules of powers and roots to the solution of problems.
- 8.NSO-C.13 Use the inverse relationship between squaring and finding the square root of a perfect square integer to solve problems.
- 8.NSO-C.14 Multiply and divide numbers written in scientific notation.
- 8.NSO-C.15 Select and use appropriate operations - addition, subtraction, multiplication, division, and positive integer exponents - to solve problems with rational numbers, including negative rationales.
- 8.NSO-E.16 Estimate and solve problems with square roots; find square roots of perfect squares and approximate the square roots of nonperfect squares by locating them between consecutive integers.
- 8.NSO-E.17 Determine estimates to a certain stated accuracy.

Reporting Category: Patterns, Relations, and Algebra (Priority Standards) (38%)

DC Standards:

- 8.PRA.1 Use tables and graphs to represent and compare linear growth patterns. In particular, compare rates of change and x- and y-intercepts of different linear patterns.
- 8.PRA.2 Set up and solve linear equations and inequalities with one or two variables using algebraic methods and graphs.
- 8.PRA.3 Use linear equations to model and analyze problems involving proportional relationships.
- 8.PRA.4 Identify the slope of a line as a measure of its steepness and as a constant rate of change from its table of values, equation, or graph. Apply the concept of slope to the solution of problems.
- 8.PRA.5 Identify the roles of variables within an equation (e.g., $y = mx + b$, expressing y as a function of x with parameters m and b).
- 8.PRA.6 Distinguish between numerical and algebraic expressions, equations, and inequalities.
- 8.PRA.9 Graph a linear equation using ordered pairs; identify and represent the graphs of linear functions.

Reporting Category: Geometry (12%)

DC Standards:

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8.G.1 Analyze, apply, and explain the relationship between the number of sides and the sums of the interior and exterior angle measures of polygons.
8.G.2 Demonstrate an understanding of the relationships of angles formed by intersecting lines, including parallel lines cut by a transversal.
8.G.3 Demonstrate an understanding of conditions that indicate two triangles are similar: the corresponding angles are congruent (AA similarity); the ratios of two pairs of corresponding sides are equal and the included angles are congruent (SAS similarity); ratios of all pairs of corresponding sides are equal (SSS similarity).
8.G.4 Use a straightedge, compass, protractor, or other tool to formulate and test conjectures and to draw geometric figures.
8.G.5 Apply spatial reasoning by recognizing and drawing two-dimensional representations of three-dimensional objects (e.g., nets, projections, and perspective drawings of cylinders, prisms, and cones).
8.G.6 Find the distance between two points on the coordinate plane using the distance formula; find the midpoint of the line segment; recognize that the distance formula is an application of the Pythagorean theorem.
<i>Reporting Category: Measurement (13%)</i>
DC Standards:
8.M.2 Understand the concept of surface area and volume; given the formulas, determine the surface area and volume of rectangular prisms, cylinders, and spheres.
8.M.3 Use a straightedge, compass, protractor, or other tools to formulate and test conjectures and to draw geometric figures.
8.M.4 Solve problems about similar figures and scale drawings. Understand that when the lengths of all dimensions of an object are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and the volume is multiplied by the cube of the scale factor.
8.M.5 Understand and use the fact that when two polygons or circles are similar with scale factor of r , their areas are related by a factor of r^2 .
8.M.6 Use proportions to express relationships between corresponding parts of similar figures.
<i>Reporting Category: Data Analysis, Statistics, and Probability (15%)</i>
DC Standards:
8.DASP.1 Revisit measures of central tendency (mean, median, and mode) and spread (range) that represent a set of data and then observe the change in each when an "outlier" is adjoined to the data set or removed from it. Use these notions to compare different sets of data and explain how each can be useful in a different way to summarize social phenomena such as price levels, clothing sizes, and athletic performances.
8.DASP.2 Select, create, interpret, and use various tabular and graphical representations of data (e.g., scatterplots, box-and-whisker plots).
8.DASP.3 Recognize practices of collecting and displaying data that may bias the presentation or analysis.
8.DASP.4 Use data to estimate the probability of future events (e.g., batting averages).
8.DASP.5 Select, create, interpret, and use various tabular and graphical representations of data; differentiate between continuous and discrete data and ways to represent them.

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Grade 10

Reporting Category: Number Sense and Operations (18%)

DC Standards:

AI.N.1 Use the properties of operations on real numbers, including the associative, commutative, identity, and distributive properties, and use them to simplify calculations.

AI.N.2 Simplify numerical expressions, including those involving integer exponents or the absolute value (e.g., $3(2^4 - 1) = 45$, $4|3 - 5| + 6 = 14$); apply such simplifications in the solution of problems.

AI.N.3 Calculate and apply ratios, proportions, rates, and percentages to solve a range of consumer and practical problems.

AI.N.4 Use estimation to judge the reasonableness of results of computations and of solutions to problems involving real numbers, including approximate error in measurement and the approximate value of square roots. (Reminder: This is without the use of calculators.)

AI.N.5 Understand the concept of n th roots of positive real numbers and of raising a positive real number to a fractional power. Use the rules of exponents also for fractional exponents.

AI.N.6 Apply the set operations of union and intersection and the concept of complement, universal set, and disjoint sets, and use them to solve problems, including those involving Venn diagrams.

Reporting Category: Patterns, Relations, and Algebra (Priority Standards) (35%)

DC Standards:

AI.P.1 Recognize, describe, and extend patterns governed by a linear, quadratic, or exponential functional relationship or by a simple iterative process (e.g., the Fibonacci sequence).

AI.P.3 Demonstrate an understanding of relations and functions. Identify the domain, range, and dependent and independent variables of functions.

AI.P.5 Demonstrate an understanding of the relationship between various representations of a line. Determine a line's slope and x - and y -intercepts from its graph or from a linear equation that represents the line.

AI.P.13 Solve equations and inequalities, including those involving absolute value of linear expressions (e.g., $|x - 2| > 5$), and apply to the solution of problems.

AI.P.14 Solve everyday problems (e.g., compound interest and direct and inverse variation problems) that can be modeled using linear or quadratic functions. Apply appropriate graphical or symbolic methods to the solution.

AI.P.15 Solve everyday problems (e.g., mixture, rate, and work problems) that can be modeled using systems of linear equations or inequalities. Apply algebraic and graphical methods to the solution.

AI.P.8 Add, subtract, and multiply polynomials with emphasis on 1st- and 2nd-degree polynomials.

AI.P.9 Demonstrate facility in symbolic manipulation of polynomial and rational expressions by rearranging and collecting terms, factoring [e.g., $a^2 - b^2 = (a + b)(a - b)$, $x^2 + 10x + 21 = (x + 3)(x + 7)$, $5x^4 + 10x^3 - 5x^2 = 5x^2(x^2 + 2x - 1)$], identifying and canceling common factors in rational expressions, and applying the properties of positive integer exponents.

Reporting Category: Geometry (15%)

DC Standards:

G.G.2 Recognize special types of polygons (e.g., isosceles triangles, parallelograms, and rhombuses).

G.G.3 Apply properties of sides, diagonals, and angles in special polygons; identify their parts and special segments (e.g., altitudes, midsegments); determine interior angles for regular polygons.

[Type text]

G.G.6 Apply the triangle inequality and other inequalities associated with triangles (e.g., the longest side is opposite the greatest angle) to prove theorems and to solve problems.
G.G.7 Use properties and theorems about congruent and similar figures and about perpendicular and parallel lines to solve problems.
G.G.8 Write simple proofs of theorems in geometric situations, such as theorems about triangles, congruent and similar figures, and perpendicular and parallel lines (e.g., the longest side is opposite the greatest angle, two lines parallel to a third are parallel to each other; perpendicular bisectors of line segments are the set of all points equidistant from the two end points).
G.G.11 Draw congruent and similar figures using a compass, straightedge, or protractor. Justify the constructions by logical argument.
G.G.12 Apply congruence and similarity correspondences (e.g., $\triangle ABC \cong \triangle XYZ$) and properties of the figures to find missing parts of geometric figures, and provide logical justification.
G.G.13 Apply properties of angles, parallel lines, arcs, radii, chords, tangents, and secants to solve problems.
G.G.14 Solve simple triangle problems using the triangle angle sum property and/or the Pythagorean theorem; study and understand more than one proof of this theorem.
G.G.15 Use the properties of special triangles (e.g., isosceles, equilateral, 30° - 60° - 90° , 45° - 45° - 90°) to solve problems.
G.G.16 Define the sine, cosine, and tangent of an acute angle. Apply to the solution of problems.
G.G.17 Demonstrate an understanding of the relationship between various representations of a line. Determine a line's slope and x- and y-intercepts from its graph or from a linear equation that represents the line. Find a linear equation describing a line from a graph or a geometric description of the line (e.g., by using the point-slope or slope y-intercept formulas). Explain the significance of a positive, negative, zero, or undefined slope.
G.G.18 Using rectangular coordinates, calculate midpoints of segments, slopes of lines and segments, and distances between two points, and apply the results to the solutions of problems.
G.G.19 Find linear equations that represent lines either perpendicular or parallel to a given line and through a point (e.g., by using the point-slope form of the equation).
G.G.20 Draw the results and interpret transformations on figures in the coordinate plane such as translations, reflections, rotations, scale factors, and the results of successive transformations. Apply transformations to the solution of problems.
G.G.21 Demonstrate the ability to visualize solid objects and recognize their projections, cross sections, and graph points in 3-D.
<i>Reporting Category: Measurement (12%)</i>
DC Standards:
G.G.23 Find and use measures of lateral areas, surface areas, and volumes of prisms, pyramids, spheres, cylinders, and cones, and relate these measures to each other using formulas.
G.G.24 Relate changes in the measurement (including units) of one attribute of an object to changes in other attributes.
G.G.25 Describe the effects of approximate error in measurement and rounding on measurements and on computed values from measurements.
G.G.26 Use dimensional analysis for unit conversion and to confirm that expressions and equations make sense.
<i>Reporting Category: Data Analysis, Statistics, and Probability (20%)</i>
DC Standards:
AI.D.1 Select, create, and interpret an appropriate graphical representation (e.g., scatter plot, table, stem-and-leaf plots, circle graph, line graph, and line plot) for a set of data, and use appropriate statistics (e.g., mean, median, range, and mode) to communicate information about the data. Use these notions to compare different sets of data.